

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

1 Identification

- **Product identifier**
- **Trade name:** Potassium Chromate
Indicator Solution W/ AF
- **Article number:** 215-03
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
OFI Testing Equipment Inc.
11302 Steeplecrest Dr.
Houston, TX 77065
(877) 837-8683
- **Information department:** techservices@ofite.com
- **Emergency telephone number:**
INFOTRAC USA - CANADA: 1-800-535-5053
INTERNATIONAL: 1-352-323-3500



2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1A H350 May cause cancer.

STOT SE 1 H370 Causes damage to organs.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
Methanol (Methyl Alcohol)
Potassium Chromate
- **Hazard statements**
Flammable liquid and vapor.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 1)

Harmful if swallowed.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

Causes damage to organs.

• Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Rinse mouth.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

• Classification system:

• NFPA ratings (scale 0 - 4)



Health = 1

Fire = 2

Reactivity = 0

• HMIS-ratings (scale 0 - 4)



Health = 3

Fire = 2

Reactivity = 0

• Other hazards

• Results of PBT and vPvB assessment

• PBT: Not applicable.

• vPvB: Not applicable.

3 Composition/information on ingredients

• Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 2)

· Dangerous components:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	28.909%
CAS: 7789-00-6	Potassium Chromate	5.214%
· Table of Nonhazardous Ingredients		
CAS: 7732-18-5	Water	65.877%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 3)

· Protective Action Criteria for Chemicals

· PAC-1:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	530 ppm
CAS: 7789-00-6	Potassium Chromate	0.56 mg/m ³
· PAC-2:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	2,100 ppm
CAS: 7789-00-6	Potassium Chromate	9.7 mg/m ³
· PAC-3:		
CAS: 67-56-1	Methanol (Methyl Alcohol)	7200* ppm
CAS: 7789-00-6	Potassium Chromate	58 mg/m ³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· Components with limit values that require monitoring at the workplace:	
CAS: 67-56-1 Methanol (Methyl Alcohol)	
PEL	Long-term value: 260 mg/m ³ , 200 ppm
REL	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI
CAS: 7789-00-6 Potassium Chromate	
PEL	Long-term value: 0.005* mg/m ³ Ceiling limit value: 0.1** mg/m ³ *as Cr(VI) **as CrO ₃ ; see 29 CFR 1910.1026

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 4)

REL	Long-term value: 0.0002 mg/m ³ as Cr; See Pocket Guide Apps. A and C
TLV	Short-term value: NIC-0.0005* mg/m ³ Long-term value: (0.05) NIC-0.0002* mg/m ³ as Cr; *inhalable, BEI, NIC-Skin, DSEN, RSEN

· Ingredients with biological limit values:

CAS: 67-56-1 Methanol (Methyl Alcohol)

BEI	15 mg/L LD50 Intraperitoneal: urine Time: end of shift LD50: Methanol (background, nonspecific)
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CAS: 7789-00-6 Potassium Chromate

BEI	25 µg/L LD50 Intraperitoneal: urine Time: end of shift at end of workweek LD50: Total chromium (fume)
	10 µg/L LD50 Intraperitoneal: urine Time: increase during shift LD50: Total chromium (fume)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 5)

· **Eye protection:**

Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	Liquid
Color:	Clear to pale yellow
Odor:	Alcohol
Odor threshold:	Not determined.

· **pH-value:** Not determined.· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

· **Flash point:** Not applicable.· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** 455 °C (851 °F)· **Decomposition temperature:** Not determined.· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Not determined.· **Explosion limits:**

Lower:	5.5 Vol %
Upper:	44 Vol %

· **Vapor pressure at 20 °C (68 °F):** 128 hPa (96 mm Hg)· **Density at 20 °C (68 °F):** 1.0025 g/cm³ (8.36586 lbs/gal)· **Relative density** Not determined.· **Vapor density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with**

Water:	Fully miscible.
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· **Partition coefficient (n-octanol/water):** Not determined.· **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

· **Solvent content:**

Organic solvents:	28.9 %
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(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 6)

Water:	65.9 %
VOC content:	28.91 %
	289.8 g/l / 2.42 lb/gl

Solids content:	0.0 %
Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

Oral	LD50	1,875-2,537 mg/kg
Inhalative	LC50/4 h	443 mg/l (rat)

CAS: 67-56-1 Methanol (Methyl Alcohol)

Oral	LD50	100 mg/kg (ATE)
Dermal	LD50	300 mg/kg (ATE)
Inhalative	LC50/4 h	3 mg/l (ATE)

CAS: 7789-00-6 Potassium Chromate

Oral	LD50	100 mg/kg (ATE)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
The product can cause inheritable damage.

- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

CAS: 7789-00-6	Potassium Chromate	I
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· **NTP (National Toxicology Program)**

CAS: 7789-00-6	Potassium Chromate	K
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(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 7)

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**
- **DOT, IMDG, IATA** UN1993
- **UN proper shipping name**
- **DOT** Flammable liquids, n.o.s. (Methanol)
- **IMDG, IATA** FLAMMABLE LIQUID, N.O.S. (METHANOL)
- **Transport hazard class(es)**
- **DOT**
- 
- **Class** 3 Flammable liquids

(Contd. on page 9)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 8)

· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	Yes
· Special precautions for user	Warning: Flammable liquids
· EMS Number:	F-E, <u>S-E</u>
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (METHANOL), 3, II

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture	
· Sara	
· Section 355 (extremely hazardous substances):	
None of the ingredients is listed.	
· Section 313 (Specific toxic chemical listings):	
CAS: 67-56-1	Methanol (Methyl Alcohol)
CAS: 7789-00-6	Potassium Chromate
· TSCA (Toxic Substances Control Act):	
Methanol (Methyl Alcohol)	
Potassium Chromate	
Water	
· TSCA new (21st Century Act) (Substances not listed)	
CAS: 7789-00-6	Potassium Chromate
· Proposition 65	
· Chemicals known to cause cancer:	
CAS: 7789-00-6	Potassium Chromate
· Chemicals known to cause reproductive toxicity for females:	
CAS: 7789-00-6	Potassium Chromate
· Chemicals known to cause reproductive toxicity for males:	
CAS: 7789-00-6	Potassium Chromate
· Chemicals known to cause developmental toxicity:	
CAS: 67-56-1	Methanol (Methyl Alcohol)

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 9)

CAS: 7789-00-6	Potassium Chromate
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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

CAS: 7789-00-6	Potassium Chromate		A(inh), D(oral), K/L(inh), CBD(oral)
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· **TLV (Threshold Limit Value established by ACGIH)**

CAS: 7789-00-6	Potassium Chromate		AI
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

CAS: 7789-00-6	Potassium Chromate
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· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

Methanol (Methyl Alcohol)

Potassium Chromate

· **Hazard statements**

Flammable liquid and vapor.

Harmful if swallowed.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

Causes damage to organs.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Rinse mouth.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Printing date 01/12/2018

Reviewed on 01/12/2018

**Trade name: Potassium Chromate
Indicator Solution W/ AF**

(Contd. of page 10)

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environment protection department.

· **Contact:**

· **Date of preparation / last revision**

01-12-2018: review SDS for accuracy. STN

Creation date for SDS 07-16-2014 LS

Revision 0.2 08-05-2016, updated DOT information STN

Revision 0.1, 05-04-2015: revised to correct emergency contact and technical contact information. STN
01/12/2018 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 1B: Germ cell mutagenicity – Category 1B

Carc. 1A: Carcinogenicity – Category 1A

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1